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EXAMINER

KE, PENG

ART UNIT

PAPER NUMBER

2174

MAIL DATE

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02/24/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/862,949	Applicant(s) HACKWORTH, BRIAN M.	
	Examiner SIMON KE	Art Unit 2174	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 January 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 77-110 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 77-110 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

This action is responsive to communications: Amendment, filed on 1/28/09.

Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

However, this action is made final.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 77-81, 83, 85, 86, 88-94, 96, 98-104, and 106-109 are rejected under 35 U.S.C. 103(a) as being unpatentable over De Jong US Patent 7,107,534, in view of Manghirmalani US Patent 5,819,028 further in view of Chu 6,346,954.

As per claim 77, De Jong teaches a method for managing a computer network, comprising:

operating a plurality of servers connected to the network, each server of the plurality of servers connected to one or more storage devices, (see De Jong figure. 13, col. 9, lines 55-col. 10, lines 2)

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organizing a plurality of volumes across the plurality of servers, wherein each volume is a logical arrangement of the one or more storage devices connected to a particular server
assigning consolidating two or more selected volumes of the plurality of volumes into a group of volumes using a graphical user interface, wherein at least two volumes in the group of volumes are located on separate servers of the plurality of servers;(see De Jong, col. 10, lines 7-25)

consolidating two or more selected volumes of the plurality of volumes into a group of volumes using a graphical user interface, wherein at least two volumes in the group of volumes are located on separate servers of the plurality of servers;(see De Jong; col. 5, lines 15-45; De Jong consolidates servers into clusters)

identifying a party interested in statistical information related to operation of a group of volumes using the graphical user interface; (see De Jong, col. 11, lines 20-30)

polling all volumes within the group of volumes by a monitoring process, for statistical information;

displaying on the graphical user interface statistical information relating only to the group of volumes; (see De Jong, col. 8, lines 40-58)

in response to determining that an event has occurred, notifying the interested party. (see De Jong, col. 11, line 20-30)

De Jong does not explicitly teach comparing the monitored statistical information to a threshold value to determine whether an event has occurred;

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Manghirmalani teaches comparing the monitored statistical information to a threshold value to determine whether an event has occurred; (see Manghirmalani, col. 12, lines 15-50)

It would have obvious to an artisan at the time of the invention to include Manghirmalani's teaching with method of claim De Jong in order to allow users to provide guideline for the monitoring system.

However, they fail to teach combining statistical information form the servers within the group of volumes in order to provide a statistical information for the group of volumes;

Chu teaches consolidating two or more selected volumes of the plurality of volumes into a group of volumes using a graphical user interface, wherein at least two volumes in the group of volumes are located on separate servers of the plurality of servers;

combining statistical information form the servers within the group of volumes in order to provide a statistical information for the group of volumes; (see Chu, figure, 5, item 72; col. 8, lines 10-20)

It would have obvious to an artisan at the time of the invention to include Chu's teaching with method of claim De Jong and Manghirmalani in order to allow users with the ability to assign customized groups.

As per claim 78, De Jong, Manghirmalani, and Chu teach the method according to Claim 77. De Jong further teaches the method comprising: determining the identity of the party in response to a predetermined event condition. (see De Jong, col. 11, lines 20-30)

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As per claim 79, De Jong, Manghirmalani, and Chu teach the method according to Claim 78. Manghirmalani further teaches the method comprising: setting a the threshold value for a parameter of a storage device in a the group of volumes predetermined and determining the event condition in response to the parameter exceeding the threshold value. (see De Jong, col. 11, lines 20-30)

As per claim 80, De Jong, Manghirmalani, and Chu teaches the method according to claim 79. De Jong further teaches the method comprising: including in the parameters at least one of a central processing utilization level, a storage disk free space, a storage disk used space, and environmental condition, and an operational status. (see De Jong, col. 8, lines 40-58)

As per claim 81, De Jong, Manghirmalani, and Chu teach the method according to Claim 77. De Jong further teaches the method comprising:
sending by e-mail to the party a notification of the statistical information related to the selected group of volumes.(see De Jong, Figure 21, col. 10, lines 45-61)

As per claim 83, De Jong, Manghirmalani, and Chu teach the method according to Claim 77. De Jong further teaches the method comprising:
retaining information with respect to the interested party in a database. (see De Jong, col. 11, line 20-30)

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As per claim 85, De Jong, Manghirmalani, and Chu teach the method according to Claim

77. De Jong further teaches the method comprising:

presenting the statistical information related to the group of volumes through a graphical user interface. (see De Jong, col.10, lines 25-45)

As per claim 86, De Jong, Manghirmalani, and Chu teach the method according to Claim

77. De Jong further teaches the method comprising:

placing alerts on the graphical user interface, the alerts identifying a problem condition shown by the statistical information related to the group of volumes. (see De Jong, col.10, lines 25-45)

As per claim 88, De Jong, Manghirmalani, and Chu teach the method according to Claim

77. De Jong further teaches the method comprising:

consolidating the statistical information related to the group of volumes with a statistical information related to an another group of volumes. (see De Jong, col. 10, lines 25-45)

As per claim 89, De Jong, Manghirmalani, and Chu teach the method according to Claim

77, further comprising:

using a RAID array of disks as a storage device of the one or more storage devices. (see De Jong, col. 4 ,lines 60-70)

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As per claims 90-94, 96, 98, 99, 101, and 102, they are rejected under the same rationale as claims 77-81, 83, 85, 86, 88, and 89. Supra.

As per claim 103, De Jong teaches a computer readable media, comprising:

said computer readable media containing instructions for execution on a processor for the practice of a method of managing a computer network, the method having the steps of, (see De Jong, col. 5, lines 30-56)

operating a plurality of servers connected to the network, each server of the plurality of servers connected to one or more storage devices, (see De Jong, col. 5, lines 45-60)

organizing a plurality of volumes across the plurality of servers, wherein each volume is a logical arrangement of the one or more storage devices connected to a particular server (see De Jong, col. 7 lines 1-23)

consolidating one-two or more selected volumes of the plurality of volumes into a group of volumes using a graphical user interface, wherein at least two volumes in the group of volumes are located on separate servers of the plurality of servers; (see De Jong, col. 9, lines 40-55; col. 5, lines 15-45; De Jong consolidates servers into clusters)

identifying a party interested in statistical information related to operation of the group of volumes using the graphical user interface; (see De Jong, col. 11, lines 20-30)

polling all volumes within the selected group of volumes by a monitoring process, for statistical information; (see De Jong, col.

displaying, on the graphical user interface, statistical information relating only to the group of volumes; (see De Jong, col. 8, lines 40-58)

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in response to determining that an event has occurred, notifying the interested party. (see De Jong, col. 11, line 20-30)

De Jong does not explicitly teach comparing the monitored statistical information to a threshold value to determine whether an event has occurred;

Manghirmalani teaches comparing the monitored statistical information to a threshold value to determine whether an event has occurred; (see Manghirmalani, col. 12, lines 15-50)

It would have obvious to an artisan at the time of the invention to include Manghirmalani's teaching with method of claim De Jong in order to allow users to provide guideline for the monitoring system.

However, they fail to teach combining statistical information form the servers within the group of volumes in order to provide a statistical information for the group of volumes;

Chu teaches combining statistical information form the servers within the group of volumes in order to provide a statistical information for the group of volumes; (see Chu, figure, 5, item 72; col. 8, lines 10-20)

It would have obvious to an artisan at the time of the invention to include Chu's teaching with method of claim De Jong and Manghirmalani in order to allow users with the ability to assign customized groups.

As per claim 104, De Jong teaches a system, comprising:

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a plurality of storage appliances, wherein each storage appliance is configured with at least one volume and each volume is a logical arrangement of a plurality of storage devices; (see De Jong, col. 7 lines 1-23)

a management station executing on a separate server from the plurality of storage appliances, the management station configured to access usage and performance information on the plurality of storage appliances and associated volumes; (see De Jong, col. 9, lines 40-55)

a graphical user interface (GUI) connected to the management station, the GUI configured to allow a user to organize two or more volumes from the plurality of storage appliances into a group of volumes, and the GUI configured to display statistical information relating to the group of volumes, wherein at least two volumes in the group of volumes are located on separate storage appliances of the plurality of storage appliances; (see De Jong, col. 10, lines 24-46)

a management station storage device connected to the management station, the management station storage device configured with a database, the database storing information about the group of volumes; (see De Jong, col.10, lines 24-46)

determine an event has occurred when the monitored statistical information exceeds the threshold value and to notify an interested party of the event. (see De Jong, col. 10, lines 24-46)

However, De Jong fails to teach a threshold value associated with statistical information of the group of volumes and the management station further configured to compare monitored statistical information of the group of volumes with the threshold value.

Manghirmalani teaches a threshold value associated with statistical information of the group of volumes and the management station further configured to compare monitored

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statistical information of the group of volumes with the threshold value. (see Manghirmalani, col. 12, lines 15-50)

It would have been obvious to an artisan at the time of the invention to include Manghirmalani's teaching with method of claim De Jong in order to allow users to provide guideline for the monitoring system.

However, they fail to teach combining statistical information from the servers within the group of volumes in order to provide a statistical information for the group of volumes;

Chu teaches combining statistical information from the servers within the group of volumes in order to provide a statistical information for the group of volumes; (see Chu, figure, 5, item 72; col. 8, lines 10-20)

It would have been obvious to an artisan at the time of the invention to include Chu's teaching with method of claim De Jong and Manghirmalani in order to allow users with the ability to assign customized groups.

As per claim 106, De Jong and Manghirmalani teach the system of claim 104. De Jong teaches wherein the management station is connected over a LAN to the plurality of storage appliances. (see De Jong, col. 5, lines 30-45)

As per claim 107, De Jong and Manghirmalani teach the system of claim 104, De Jong further teaches wherein each volume is formed from two or more RAID groups within the plurality of storage devices. (see De Jong, col. 6, lines 25-45)

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As per claim 108, De Jong and Manghirmalani teach the system of claim 104, De Jong further teaches wherein the interested party is notified by an email, alarm, alert, telephone call, or page that is sent using an automated system. (see De Jong, col. 11, lines 15-22)

As per claim 109, De Jong and Manghirmalani teach the system of claim 104, De Jong further teaches wherein the interested party is one or more users, administrators, or managers. (see De Jong, col. 11, lines 15-23)

Claims 82, 84, 95, 97, and 110 rejected under 35 U.S.C. 103(a) as being unpatentable over anticipated De Jong, US Patent 7,107,534, in view of Manghirmalani US Patent 5,819,028 in view of Chu US Patent 6,346,954 further in view of Welter US Patent 6,633,912.

As per claim 82, De Jong, Manghirmalani, and Chu teach the method according to Claim 81. They fail to teach the method further comprising:

including at least one web link in the e-mail for use by the interested party.

Welter teaches at least one web link in the e-mail for use by the interested party.(see Welter, col. 21, lines 26-61)

It would be obvious to an artisan at the time of the invention to include Welter's teaching with method of De Jong, Manghirmalani, and Chu in order to allow user to view the network information through internet browser.

As per claim 95, it is rejected under the same rationale as claim 82. Supra.

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As per claim 84, De Jong, Manghirmalani, and Chu teach the method according to Claim 77. They fails to teaches further comprising:

reporting the statistical information related to the selected group of volumes to a web page so that the party can obtain the statistical information by accessing the web page,

reporting the statistical information related to the selected group of volumes to a web page so that the party can obtain the statistical information by accessing the web page (see Welter, col. 21, lines 26-61)

It would be obvious to an artisan at the time of the invention to include Welter's teaching with method of De Jong, Manghirmalani, and Chu in order to allow user to view the network information through internet browser.

As per claim 97, it is rejected under the same rationale as claim 84. Supra.

As per claim 110, it is rejected under the same rationale as claim 84. Supra.

Claims 87, 100, and 105 rejected under 35 U.S.C. 103(a) as being unpatentable over anticipated De Jong, US Patent 7,107,534, in view of Manghirmalani US Patent 5,819,028 in view of Chu US Patent 6,346,954 further in view of York US Patent 6,505,256

As per claim 87, De Jong, Manghirmalani, and Chu teach the method according to Claim 86. They fail to teach method comprising:

coding the alerts with color to indicate a severity of the problem condition.

York teaches the method comprising:

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coding the alerts with color to indicate a severity of the problem condition. (see York, col. 6, lines 30-55)

It would be obvious to an artisan at the time of the invention to include York's teaching with the method of De Jong, Manghirmalani, and Chu in order to provide maximum flexibility for user to set alarm color based upon severity.

As per claim 100, it is rejected under the same rationale as claim 87. Supra.

As per claim 105, De Jong and Manghirmalani teach the system of claim 104. They fail to teach wherein the statistical information stored on the database is bundled in various time periods of days, weeks, quarters, or years that each have roughly a same number of intervals, each bundle having a different relative time span between respective intervals to have samples for more recent time periods maintained in smaller intervals, while samples for older time periods are maintained at successively longer sample intervals.

Sekizawn teaches the statistical information stored on the database is bundled in various time periods of days, weeks, quarters, or years that each have roughly a same number of intervals, each bundle having a different relative time span between respective intervals to have samples for more recent time periods maintained in smaller intervals, while samples for older time periods are maintained at successively longer sample intervals. (see Sekizawn, fig. 42 A-B)

It would be obvious to an artisan at the time of the invention to include Sekizawn's teaching with the method of De Jong and Manghirmalani in order to provide user with periodic exempling.

Response to Argument

Applicant's arguments filed on 7/15/08 have been fully considered but they are not persuasive.

Applicant's arguments with respect to claims 77-110 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SIMON KE whose telephone number is (571)272-4062. The examiner can normally be reached on M-Th and Alternate Fridays 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen S. Hong can be reached on (571) 272-4124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Peng Ke
/Peng Ke/
Primary Examiner, Art Unit 2174